

REMARKS

I. Status of the Application

Claims 1-16 are pending in this application. In the October 4, 2003 office action, the Examiner:

- A. Rejected claims 1-7 and 14-16 as allegedly being indefinite under 35 U.S.C. §112, second paragraph; and
- B. Rejected claims 1-16 under 35 U.S.C. § 102(b) as allegedly being anticipated by U.S. Patent No. 5,898,687 to Harriman et al. (hereinafter "Harriman").

In this response, applicants have amended claims 1 and 7-14 to further particularly point out and distinctly claim the invention. Applicants respectfully traverse the rejections of claims 1-16 and request reconsideration of the pending claims in view of the foregoing amendments and the following remarks.

II. The Amendments to the Claims Do Not Constitute New Matter

Claims 9-13 have been amended to correct what amounts to be inadvertent typographical errors. In particular, each of claims 9-13 as originally filed depended from claim 8, which is directed to a packet queuing control (PQC). However, the preambles of originally filed claims 9-13 incorrectly recited "The network switch of claim . . .". The claims have been amended to read "The PQC of claim" It is respectfully submitted that such amendments do not constitute new matter.

Claim 7 has been amended in response to the indefiniteness rejection by the Examiner.

In particular, the Examiner objected to the reference in claim 7 to “a receiver”, when a receiver had already been recited in claim 1. Claim 7 is amended herein to acknowledge that the receiver of claim 7 does indeed reference the receiver of claim 1. It is respectfully submitted that the amendment to claim 7 does not constitute new matter.

Claims 1 and 8 have been amended to more particularly point out and distinctly claims the inventions recited therein. Claim 1 has been amended to further point out that the broadcast queue includes a pointer to a next location in the main queue. This is similar to a limitation in claim 14 and is in any event disclosed in the specification as originally filed at page 21, lines 9-19. Claim 8 has been amended to include a recitation that the main queue of the packet queuing control stores information corresponding to both unicast *and* broadcast packets. In particular, as shown in Fig. 10 and described in the specification as originally filed at page 21, lines 1-19, the main queue stores information identifying transmission ports for both broadcast and unicast packets. It is therefore respectfully submitted that the amendments to claims 1 and 8 do not constitute new matter.

III. The Indefiniteness Rejections Should be Withdrawn

Claim 1 stands rejected as allegedly being indefinite. In particular, the Examiner correctly noted that the recitation of “the receiver” lacked an antecedent basis. Claim 1 has been amended to recite “a receiver”. It is respectfully submitted that the indefiniteness rejection of claim 1 is now moot and should be withdrawn.

The Examiner further rejected claim 7 as including a recitation to “a receiver”, noting that it was unclear as to whether this receiver referred to the same receiver as claim 1. Claim 7

has been amended to clear reference the receiver originally cited in claim 1. It is respectfully submitted that the indefiniteness rejection of claim 7 is now moot and should be withdrawn.

Claim 14 stands rejected as allegedly being indefinite on the basis that it was allegedly “unclear why the broadcast queue is storing pointers that correspond to the main queue, since the main queue is used for unicast packets and not broadcast packets”. (October 4, 2003 Office Action at pp.2-3). It is respectfully submitted that claim 14 is sufficiently definite as originally filed.

To this end, the Examiner appears to have misperceived the invention of claim 14. This is evident from the Examiner’s statement that “the main queue is used for unicast packets and not broadcast packets”. Claim 14 does not necessarily recite that the main queue is used for unicast packets and not broadcast packets. Claim 14 does indeed recite that *pointers* to the next main queue location are stored in the main queue for unicast packets and that *pointers* to the next main queue location are stored in the broadcast queue for broadcast packets. In other words, there is a *next* main queue location for both unicast and broadcast packets. However, it is the *pointer* to that next main queue location that is stored in either the main queue or the broadcast queue.

It is respectfully requested that the Examiner reconsider the indefiniteness rejection of claim 14 in light of the foregoing explanation.

IV. The Rejection of Claim 14 Should be Withdrawn

Claim 14 stands rejected as allegedly being anticipated by Harriman. As discussed above in connection with the indefiniteness rejection of claim 14, it is believed that the

rejection of claim 14 over Harriman is based on a misperception of the claimed subject matter.

A. The Invention of Claim 14

Claim 14 is directed to a method that includes the steps of determining whether a receive data packet is to be transmitted as unicast transaction. If so, then a pointer corresponding to a next location in the main queue is stored in the main queue. If not, however, then a plurality of pointers corresponding to next locations in the main queue are stored in a broadcast cue. Referring to Fig. 10, by way of nonlimiting example, the main queue for location 0, which corresponds to a unicast packet, includes a pointer to the next location in the main queue, 1. For the broadcast packet in the main queue at location 1, the broadcast queue contains pointers 2, 3 and 4 for next locations in the main queue.

B. Harriman does not Store Pointers to a Main Queue in the Broadcast Queue

Harriman does not teach or suggest a system that includes the step of “storing a plurality of pointers in a broadcast queue corresponding to one or more next locations in the main queue” as called for in claim 14. Harriman has separate and distinct elements for handling unicast and multicast operations. The multicast queue elements do not reference or contain pointers to the unicast queue elements.

In the rejection of claim 14, the Examiner provided the following analysis with respect to the step of storing pointers to the main queue in the broadcast queue.

storing a plurality of pointers in a broadcast queue corresponding to the next location in the main queue corresponding to a memory location from which data is to be transmitted from the network switch (if the packet is to be multicast then a plurality of pointers corresponding to the packets are stored in the FIFO queues in the multicast queue (see Figure 2)).

(October 4, 2003 Office Action at p.6). Thus, the Examiner has only alleged that the broadcast queues of Harriman store pointers corresponding to the packets, not pointers corresponding to *the next location in the main queue*, as called for in claim 14.

Because Harriman fails to disclose the step of storing a plurality of pointers in a broadcast queue corresponding to one or more next locations in the main queue, as claimed, it is respectfully submitted that the anticipation rejection of claim 14 is in error and should be withdrawn.

V. Claims 15 and 16

Claims 15 and 16 both stand rejected as allegedly being anticipated by Harriman. Claims 15 and 16 both depend from and incorporate all of the limitations of claim 14. Accordingly, for at least the same reasons as those set forth above in connection with claim 14, it is respectfully submitted that the rejection of claims 15 and 16 as being anticipated by Harriman should be withdrawn.

VI. Claim 1

Claim 1 also stands rejected as allegedly being anticipated Harriman. Claim 1 has been amended to further recite that the *broadcast queue* of the packet queuing control stores “information including at least one pointer to a next location the main queue corresponding to a memory location from which data is to be transmitted”. As discussed above in connection with claim 14, Harriman does not teach storing a pointer to a next location in the main queue in the broadcast queue.

Accordingly, for reasons substantially similar to those discussed above in connection with claim 14, it is respectfully submitted that the rejection of claim 1 is in error and should be withdrawn.

VII. Claims 2-7

Claims 2-7 all stand rejected as allegedly being anticipated by Harriman. Claims 2-7 all depend from and incorporate all of the limitations of claim 1. Accordingly, for at least the same reasons as those set forth above in connection with claim 1, it is respectfully submitted that the rejection of claims 2-7 as being anticipated by Harriman should be withdrawn.

VIII. Claim 8

Claim 8 also stands rejected as allegedly being anticipated Harriman. Claim 8 is directed to a packet queuing control that includes a broadcast queue and a main queue. As amended, claim 8 recites that the main queue includes information corresponding to unicast packets *and* broadcast packets. As shown, for example, in claim 10, the main queue includes information regarding the packet location and the port or ports from which the packet is to be transmitted for *both* unicast and broadcast packets.

Harriman fails to teach, show or suggest a main queue that stores both unicast and broadcast information, along with a separate broadcast queue that stores information relating to broadcast packets. As a consequence, it is respectfully submitted that claim 8 as amended is allowable over the prior art.

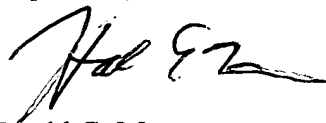
IX. Claims 9-13

Claims 9-13 all stand rejected as allegedly being anticipated by Harriman. Claims 9-13 all depend from and incorporate all of the limitations of claim 8. Accordingly, for at least the same reasons as those set forth above in connection with claim 8, it is respectfully submitted that the rejection of claims 9-13 as being anticipated by Harriman should be withdrawn.

X. Conclusion

For all of the foregoing reasons, it is respectfully submitted the applicants have made a patentable contribution to the art. Favorable reconsideration and allowance of this application is, therefore, respectfully requested.

Respectfully submitted,



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